



*United States
Department of
Agriculture*

*Agricultural
Research
Service*

*Office of
Technology
Transfer*

*mailing address:
G. Byron Stover, Esq.
Patent Advisor
USDA-ARS-OTT
5601 Sunnyside Ave.
Room 4-1182
Beltsville, MD 20705
byron.stover@nps.ars.usda.gov*

Fax Transmittal Sheet

From: G. Byron Stover; phone 301-504-4783, fax 301-504-5060
To: Examiner David M. Brunsman (Group 1755) **Fax #** 703-872-9306
RE: Serial No. 10/615,494
Date: 15 February 2005 **Pages:** 2 including cover page

U.S. patents, U.S. patent applications, and other publications by David Johnston, Vijay Singh, Steven Eckhoff, Kevin Hicks, and Robert Moreau may be relevant to the prosecution of U.S. Patent Application Number 10/615,494, "Grain Fractionation" by Doug van Thorre.

**RECEIVED
CENTRAL FAX CENTER
FEB 15 2005**

CONFIDENTIALITY

This facsimile message may contain information which is legally privileged and confidential. It is intended only for the use of the recipient named above. If you are not the intended recipient, we emphasize that any dissemination, distribution or copying of this document or its contents is strictly prohibited. If you have received this in error, please notify us immediately by telephone.

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2005/0016525 A1
Thorre (43) Pub. Date: Jan. 27, 2005

(54) GRAIN FRACTIONATION

(52) U.S. Cl., 127/68

(76) Inventor: Doug Van Thorre, Minneapolis, MN
(US)

(57) ABSTRACT

Correspondence Address:

Schwegman, Lundberg, Woessner & Kluth, P.A.
P.O. Box 2938
Minneapolis, MN 55402 (US)

(21) Appl. No.: 10/615,494

(22) Filed: Jul. 8, 2003

Publication Classification

(51) Int. Cl. 7, C08B 30/00

The present invention includes a method for extracting protein, oil and starch from grain. The method includes: Providing kernels or seeds comprising a germ and pericarp comprising protein, oil, and starch; Steeping the kernels or seeds in a steeping reactor for a time effective to soften the kernels and seeds; Milling the steeped corn kernels to separate the germ from the starch/pericarp forming a germ stream and a starch/pericarp stream; Subjecting the germ to rapid pressurization/depressurization in order to extract oil and protein from the germ; and separating the starch from the pericarp.